# Report of Analysis

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|---|---|---|---|
| **Client:** | Sprague Energy | **Lab Reference Number:** | 2010-NYHB-001849 |
| **Job Location:** | Sprague Rensselaer, New York | **Date Taken:** | 27-Jul-2010 |
| **Our Reference Number:** | | **Client Reference:** | V-10-00962 |
| | **After DBL 22 & Circulation ( 2nd sampling)** | | |
| **EPA Qty. - US Gals.:** | | | |
| **EPA Qty. - US Bbls.:** | | | |

| | | | |
|---|---|---|---|
| **Sample ID:** | **2010-NYHB-001849-052** | **Sample Designated As:** | 6OIL |
| **Vessel/Location:** | Albany Lab | **Date Tested:** | 27-Jul-2010 |
| **Representing:** | Shore Tank 15 Upper | | |

| Method | Test | Result | Unit |
|---|---|---|---|
| ASTM D4052 | API Gravity @ 60 °F | 9.5 | °API |
| ASTM D4294 | Sulfur Content | 1.17 | Wt % |

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|---|---|---|---|
| **Sample ID:** | **2010-NYHB-001849-053** | **Sample Designated As:** | 6OIL |
| **Vessel/Location:** | Albany Lab | **Date Tested:** | 27-Jul-2010 |
| **Representing:** | Shore Tank 15 Middle | | |

| Method | Test | Result | Unit |
|---|---|---|---|
| ASTM D4052 | API Gravity @ 60 °F | 9.5 | °API |
| ASTM D4294 | Sulfur Content | 1.16 | Wt % |

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|---|---|---|---|
| **Sample ID:** | **2010-NYHB-001849-054** | **Sample Designated As:** | 6OIL |
| **Vessel/Location:** | Albany Lab | **Date Tested:** | 27-Jul-2010 |
| **Representing:** | Shore Tank 15 Lower | | |

| Method | Test | Result | Unit |
|---|---|---|---|
| ASTM D4052 | API Gravity @ 60 °F | 9.5 | °API |
| ASTM D4294 | Sulfur Content | 1.15 | Wt % |

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|---|---|---|---|
| **Sample ID:** | **2010-NYHB-001849-055** | **Sample Designated As:** | 6OIL |
| **Vessel/Location:** | Albany Lab | **Date Tested:** | 27-Jul-2010 |
| **Representing:** | Shore Tank 15 Suction | | |

| Method | Test | Result | Unit |
|---|---|---|---|
| ASTM D4052 | API Gravity @ 60 °F | 9.5 | °API |
| ASTM D4294 | Sulfur Content | 1.13 | Wt % |

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|---|---|---|---|
| **Sample ID:** | **2010-NYHB-001849-056** | **Sample Designated As:** | 6OIL |
| **Vessel/Location:** | Albany Lab | **Date Tested:** | 28-Jul-2010 |
| **Representing:** | Shore Tank 15 Equal UML Composite | | |

| Method | Test | Result | Unit |
|---|---|---|---|
| ASTM D4052 | API Gravity @ 60 °F | 9.5 | °API |
| ASTM D4294 | Sulfur Content | 1.16 | Wt % |
| ASTM D97 | Pour Point | 9 | °C |
| ASTM D97 | Pour Point | 48.2 | °F |
| ASTM D445 | KV@122 °F / 50 °C | 391.5 | $mm^2/s$ |
| ASTM D2161 | Saybolt Furol viscosity, 122 °F | 184.8 | SFS |
| ASTM D93 | Procedure Used | B | |
| ASTM D93 | Corrected Flash Point (F), Auto | >200 | °F |
| ASTM D1796 | Water and Sediment | 0.20 | Vol % |
| ASTM D482 | Ash @ 775 °C | 0.056 | Wt % |
| ASTM D240 | Gross BTU - LB | 18583 | BTU/lb |
| ASTM D240 | Gross BTU - Gal (Calculated) | 155317 | BTU/gal |
| ASTM D473 | Sediment by Extraction | 0.06 | Mass % |
| ASTM D4530 | Average Micro Method Carbon Residue | 10.8 | Wt % |

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# Report of Analysis

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|---|---|---|---|
| **Sample ID:** | **2010-NYHB-001849-056** | **Sample Designated As:** | 6OIL |
| **Vessel/Location:** | Albany Lab | **Date Tested:** | 28-Jul-2010 |
| **Representing:** | Shore Tank 15 Equal UML Composite | | |

| Method | Test | Result | Unit |
|---|---|---|---|
| ASTM D5762 | Nitrogen Content | 0.49 | Wt % |
| ASTM D5708_MOD | Sodium, ppm | 11.0 | ppm |
| ASTM D5708 | Vanadium Content | 41.9 | mg/kg |
| ASTM D3279 | n-Heptane Insolubles (Asphaltenes) | 3.4 | Wt % |
| IP 143 | Asphaltene Content | 3.4 | Wt % |
| ASTM D95 | Water Content | 0.3 | Vol % |

Signed: _____ Date: _____

Intertek

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